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	58	R. L. Mills, "Classical Quantum Mechanics," Physics Essays, Vol. 16, No. 4, December, (2003), pp. 433-498. (Web Publication Date: May 23, 2002.)	
	60	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDL Films from Solid Carbon," Journal of Materials Science, in press. (Web Publication Date: May 3, 2002.)	
	X	J. Phillips, R.L. Mills, X Chen, "Water Bath Calorimetric Study of Excess Heat of Resonance Transfer' Plasmas," J. Appl. Phys., Vol. 96, No. 6, (2004) 3095–3102. (Web Publication Date: June 16, 2003.)	
	80	R.L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen Atom According to Quantum Mechanics," Annales de la Fondation Louis de Broglie, submitted. (Web Publication Date: Jan. 27, 2003.)	
	81	R. Mills, R. Ray, B. Dhandapani, W. Good, P. Jansson, M. Nansteel, J. He, A. Voigt, "Spectroscopic and NMR Identification of Novel Hydride Ions in Fractional Quantum Energy States Formed by an Exothermic Reaction of Atomic Hydrogen with Certain Catalysts," European Physical Journal Applied Physics, 28 (2004), 83–104. (Web Publication Date: Feb. 21, 2003.)	
X	88	R. Mills, J. Sankar, A. Voigt, J. He, P. Ray, B. Ohandapani, "Role of Atomic Hydrogen Density and Energy in Low Power CVD Synthesis of Diamond Films," Thin Solid Films, 478, (2005) 77–90. (Web Publication Date: Dec. 22, 2003.)	
	94	R. L. Mills, 'The Nature of the Chemical Bend Revisited and an Alternative Maxwellian Approach," Physics Essays, in press (Web Publication Date: Aug. 6, 2003.)	
$\times$	96 \	J J. Phillips, C.K. Shen, R. L. Mills, "Evidence of the Production of Hot Hydrogen Atoms in RF Plasmas by Catalytic Reactions Between Hydrogen and Oxygen Species," Spectrochimica Acta Part B. Atomic Spectroscopy, submitted. (Web Rublication Date: Sept. 12, 2003.)	
	97	R. L. Mills, P. Ray, B. Chandapani, "Evidence of an Energy Transfer Reaction Between Atomic Hydrogen and Argon II or Helium II as the Source of Excessively Hot H Atoms in RF Plasmas," Journal of Plasma Physics, in press. (Web Publication Date: Sept. 26, 2003.)	
	98	R. L. Mills, Y. Lu, J. He, M. Nansteel, P. Ray, X. Chen, A. Voigt, B. Dhandapani, "Spectral Identification of New States of Hydrogen," New Journal of Chemistry, submitted. (Web Publication Date: Nov. 18, 2003.)	

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Examine r Initials*								<b>1</b> <sup>2</sup>	
	100	R. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride from a Helium Plasma Reaction," Materials Chemistry and Physics, submitted. (Web Publication Date: Nov. 17, 2003.)							
	101	Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Puel Chemistry, Session: Onemistry of Solid, Liquid, and Gaseous Fuels, 227th American Chemical Society National Meeting, March 28-April 1, 2004, Analisim, CA.							
$\times$	102	R. L. Mills, Electron A	"Exac toms,	ct Classical Quantum "Phys. Essays, subn	Mechanical Schitted. (Web Ru	elutions for O blication Date	ne- through Twenty- e: April 28, 2004.		
	103	R.L. Mills, Dhandapani, W. Good, J. He, "New States of Nydrogen Isolated from R.CO <sub>3</sub> Electrolysis Gases," Electrochim. Acta, submitted. (Web Rublication Date: April 28, 2004.)							
X	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Volst, W. Good, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Advances in Hydrogen Energy, 228th American Chemical Society National Meeting, August 22–26, 2004, Philadelphia, PA.							1 \	
	R. Mills, "Physical Solutions of the Nature of the Atom, Photon, and Their Interactions to Form Excited and Predicted Hydrino States", New Journal of Physics, submitted.								
	114	for the Exti	raordii Journ	ar, B. Dhandapani, "I nary Selective H Bal- ral of Applied Physics ower.com).	fier $lpha$ Broaden	ing in Øertai	n Hydrogen Mixed		
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	105	Phillips, C.K. Chen, R. L. Mills, "Evidence of Catalytic Production of Not Hydrogen in RF-Generated Hydrogen/Argon Plasmas," J. Appl. Physics, submitted. (Web Publication Date: September 7, 2004)	
	106	R. L. Mills, "Exact Classical Quantum Mechanical Solution for Atomic Helium which Predicts Conjugate Parameters from a Unique Solution for the First Time," Foundations of Science, submitted. (Web Publication Date: October 28, 2004.)	
	107	R. L. Mills, "Maxwell's Equations and QED: Which is Fact and Which is Fiction," Physical Scripta, submitted. (Web Publication Date: October 28, 2004.)	
	108	P. L. Mills, J. He, M. Nansteel, B. Dhandapani, "Catalysis of Atomic Hydrogen to New Hydrides as a New Power Source," International Journal of Global Energy Secues (IJGEI). Special Edition in Energy System, submitted. (Web Publication Date: April 4, 2005.)	
	109	R. L. Mills, M. Nansteel, J. He, S. Dhandapani, "Low-Voltage ELV and Visible Light Source Due to Catalysis of Atomic Hydrogen," J. Plasma Physics, submitted. (Web Publication Date: April 15, 2005.)	
	110	R. L. Mills, J. He, Z, Chang, W. Good, Y. Lu, B. Dhaodapani, "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source," Prepr. Pap.—Am. Chem. Soc., Div. Fuel Chem. 2005, 50(2). (Web Publication Date: April 22, 2005.)	
	111	R. L. Mills, J. He, Z, Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrog Novel Hydrogen Species H (1/4) and H <sub>2</sub> (1/4) as a New Power Source," Thermochimica submitted. (Web Publication Date: May 6, 2005.)	
	112	R. L. Mills, J. He, Y. Lu, Z, M. Mansteel, Chang, B. Dhandapani, "Comprehensive Identific and Potential Applications of New States of Hydrogen." Central European Journal of Physubmitted. (Web Publication Date: May 9, 2005.)	

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		SPITCHLEY et al, "Energy shifts and forbidden transitions in H, due to electronic g/u symmetry breaking", Molecular Physics, 2003, Vol. 101, Nos. 4-5, pp. 651-661, Taylor & Francis Ltd.	
$\times$		GAMBUS et al., "Spectroscopic Study or Low-Rressure Water Plasmas and Their Reactions with Liquid Hydrocarbons", Energy & Fuels, 2002, 16, pp. 172-176.  American Chemical Society	
·		CVETANOVIC et al., "Excessive Balmer line broadening in a plane cathode abnormal glow discharge in hydrogen", Journal of Applied Physics, 97, 933302 (2005), American Institute of Physics	
$\overline{\times}$		AKATSUKA et al., "Stationary population inversion of hydrogen in an arc-heated magnetically trapped expanding hydrogen-helium plasma jet", Physical Review E, 49, 2, pp. 1534-1544, February, 1994, The American Physical Society	
		MUBAKAMI et el., "Chemisorption of hydrogen into a graphite-potassium intercalation compound Cek studied by means of position annihilation", J. Chem. Phys., 62 (10), May 15, 1995, American Institute of Physics	
		AHN, "Hydrogen Storage in Metal-Modified Single-Wallet Carbon Nanotubes", Division of Engineering and Applied Science, California Institute of Technology, September 15, 2001	
		DUAN et al., "Numerical calculation of energies of some excited states in a helium atom", Eur. Phys. J., D 19, (2002), pp. 9-12, Societa Italiana di Fisica, Springer-Verlag 2002	
-		NIXON et al., "Formation and structure of the potassium graphites", Brit. J. Appl. Phys., Ser. 2, Vol., 1, pp. 291-299 Great Britain, 2002	
		ZELLINGER, "Experiment and the foundations of quantum physics", Reviews of Modern Physics, Vol 71, No. 2, pp. S288-S297, Centenary 1999, The American Physical Society	

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		SOTTON et al, "Complexes of Cyclic 2-Oxacarberres, I. A Spontaneous Cyclization to Form a Complex of 2-Oxaclyclopentylidene", Journal of the American Chemical Society, 93:11, pp 2672-2676, June 2, 1971	
$\times$		LINDSAY et al., "A remeasurement of the 2.4 µm spectrum of $J = M_2$ pairs in a parahydrogen crystal", Journal of Molecular Spectroscopy, 218. Pp. 131-133, 2003	
		JUAREZ et al, "Photoelectron angular distributions of relationally resolved states in para-H2+: A closer to the dynamics of molecular photoionisation", The University of Manchester Atomic, Molecular & Laser Manipulation Group, pp.1-5	
		WEISSTEIN, "Ortho-Para Hydrogen", http://scienceworld.wolfram.com/physics/Ortho- ParaHydrogen.html	
		SMITH, "Infrared spectra of BO <sub>2</sub> - in the alkali halides-L. Potassium and rubidium halides", Spectrochimica Acts, Vei. 30A, pp. 875-882, Pergamon Press, 1974	
1		CEITCH et al., "Raman Specreoscopy of Hydrogen Molecules in Crystalline Silicon", Physical Review Letters, 81:2, pp. 421-424, July 13, 1988, The American Physical Society	
X		CHEN et al., "Key to Understanding Interstitial H <sub>2</sub> in Si", Physical Review Letters, 88:10, pp. 105507-1 - 105507-4, March 11, 2002, The American Physical Society	
		CHEN et al., "Rotation of Molecular Hydrogen in Si: Unambiguous Identification of Optio-H <sub>2</sub> and Para-D <sub>2</sub> ", Physical Review Letters, 88:24, pp. 245503-1 - 245503-4, June 17, 2002, The American Physical Society	
		LAVROV et al., "Ortho and Para Interstitial H <sub>2</sub> in Silicon" Physical Review Letters, 89:21, pp. 215501-1 - 218501-4, November 18, 2002, The American Physical Society	
		STAVOLA et al, "Interstitial H <sub>2</sub> in Si: are all problems solved?", Physica B, pp. 58-66, 200s Elsevier B.V.	

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				atalysis of Atomic Hydr B, BlackLight Power, Inc	ogen to Novel Hydrides as	a New Power	
		DECIUS e	al, "	Force Constants of the vsics, 56:10, pp. 51894	Metaborate Ion in Alkali H 5190, May 15, 1972	alides", The Journal	i _
		"Infrared s pp. 800-60	pectra 2	a of the metaborate ion	in alkali halide solid soluti	on", Research Notes,	X
		SMITH, "A Chemical µ	nharr ohysid	monic force field of the cs, 58:11, pp. 4776-477	metaborate ion in alkali ha 78, June 1, 1973	alides", The Journal of	
				al., "Infrared Spectra on istry, pp. 168-174	f Metaborate Monomer an	d Trimer lone",	
	X	JOMES et Isotopic Sp 1968	al., "l ecie:	Force Constants of Nick The Journal of Cher	kel Carbonyl from Vibration mical Physics, 48:6, pp. 26	nal Spectra of 62-2670, March 15,	
					alkali halides-I. Potassium b. 875-882, 1974, Pergamo		$\times$
				ER <i>et al.</i> , "Kinetics of T pp. 862-870, Sept./Oct	hermal Decomposition of 1973	TiH <sub>2</sub> ", J. Vac. Sci.	
				acteristics for Scandiur ay 24, 2001, Spectra-M	n Tyse Dispenser Cathodo lat, Inc.	es", HealWeve Labs,	
				acteristics of 'M Type' I	Dispenser Cathodes", Hea	tWave Labs, Inc.,	

Examiner Signature	Aus	y Isan	Joster	Date Considered	8	128/2005	
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"Practical Aspects of Modern Dispenser Cathodes", Microwave Journal, September,

1979

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here is English language Translation is attached.

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		"Standard Series Barium Tungsten Dispenser Cathodes", HeatWave Labs, Inc. 18- 198, July 29, 2002, Spectra-Mat, Inc.
		ABATE et al., "Optimization and enhancement of H ions in a magnetized sheet plasma", Review of Scientific Instruments, 1:10, pp. 3689-3695, October 2000, American Institute of Physics
		CHABERT et al., "On the influence of the gas velocity on dissociation degree and gas temperature in a flowing microwave hydrogen discharge", yournal of Applied Physics, 84:1, pp. 161-167, July 1, 1009, American Institute of Physics
		GORDON et al., "Energy coupling efficiency of a bydrogen microwave plasma reactor", Journal of Applied Physics, 89:3, pp. 1544-1549, February 1, 2001, American Institute of Physics
X		RADOVANO et al., "Time-resolved Barner-alpha emission from fast hydrogen atoms in low pressure, radio-frequency discharges in hydrogen", Appl. Phys. Lett., 66:20, pp. 2637-2639, May 15, 2995
		D. UROVIC et al., "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", J. Appl. Phys., 74:11, pp. 6558-6565, December 1, 1993, American Institute of Physics
$\times$		KONJEVIC, "Plasma Broadening and Shifting of Non-Hydrogenic Spectral Lines: Present Status and Applications", Physics Reports, 315, pp. 339-401, 1999, Elsevier
<i>—</i>		BENESCH et al., "Line shapes of atomic Nydrogen in hollow-cathode discharges",  Optics Letters, 9:8, pp. 338-340, August 1984, Optical Society of America
		AYERS, et al., "Shapes of atomic hydrogen lines produced at a cathode surface", Physical Review A, 37:1, pp. 184-200, January 1, 1988. The American Physical Society
		ADAMOV, et al., "Doppler Spectroscopy of Hydrogen and Deuterium Balmer Alpha Line in an Abnormal Glow Discharge", IEEE Transactions on Rlasma Science, 31:3, pp. 444-454, June 3, 2003
Examiner Signature		Susy Isang Frate Considered 8/28/2005

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		JOVICEVIC et al., "Excessive Balmer line broadcasting in microwave-induced discharges", Journal of Applied Physics, 95:1, pp. 24-29, January 1, 2004, American Institute of Physics	
	$\times$	DJUROVIC et al., "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure of discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6556-6565, December 1, 1993, American Institute of Physics	
		MAYO, "Thermalization and Energy Distribution in 20ld Laboratory Plasmas Comments on the Possibility of Mono-Energetic Species", April 20, 2004	
	$\times$	VIDENOVIC et al, "Spectroscopic investigations of a cathode fall region of the Grimm-type glow discharge", Spectrochimica Acta Part B, 51, pp. 1707-1731, 1996	
		BARBEAU et al., "Spectroscopic investigation of energetic atoms in a DC hydrogen flow discharge, pp. 1168-1174, 1990 IOP Publishing Ltd.	
		KONJEVIC et al., "Emission Spectroscopy of the Cathode Fall Region of an Analytical Glow", J. Phys. IV France, 7, pp. 04-247-C4-258, Optober 1997	
		LIFSHITZ et al., "Resonance absorption measurements of atom concentrations in reacting gas mixtures. I. Shapes of H and D Lyman-α lines from microwave sources", J. Chem. Phys., 70:12, pp. 5607-5613, June 15, 1979, American Institute of Physics	
		KURAICA et al., "Line shapes of atomic hydrogen in a planecathode abnormal glow discharge" Physical Review A, 46:7, pp. 4429-4432, October 1, 1992, The American Physical Society	
		KURAICA et al., "On the Atomic Hydrogen Line Strapes in a Plane-Cathode Obstructed Glow Disenarge", Physica Scripta., 50, pp. 487-492, 1994	

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		OLTHOFF Electronics Institute of	et al. Con Stan	., "Studies of Ion Kinetic ference RF Reference dards and Technology,	c-Energy Distributions Cell", Journal of Reseat 106:4, pp. 383-400, Ju	in the Gaseous arch of the Mational uly-August 1995	
		RADOVAN in Ar-H₂ ra	OV e	et al., "Ion kinetic-energ equency discharges", J	y distributions and Ball . Appl. Phys., 78:2, po	mer-alpha ( $H_{\alpha}$ ) excitation . 746-756, July 15, 1995	X
		in a low-pre	essur	I., "Hydrosen Balmer al e rf discharge", <i>J. Appl</i> institute of Physics	pha line shapes for hy Phys., 74:11, pp. 655	odrogen-argon mixtures 58-6565, December 1,	
		ALEXEFF Compressi 286-288, A	ons (	, "Collisionless Ion-Wa Coefficient of Plasma E N6, 1999	Propagation and the lectrons", Physical Re	e Determination of the view Letters, 15:7, pp.	
		ARATA et Fusion Ted	al., "F chnole	Reproducible 'Cold' Fus ogy, 22, pp. 287-295, S	ion Reaction Using a eptember 1992	Complex Cathode",	X
$\times$		spectra of	Β <b>Ο,</b> Έ	et al., "Reactions of bo 3O2, B2O2, B2O3, and December 15, 1991			
		SPURGIN, Electrical E	Dire nerg	ect Conversion of the R y", Master's Thesis, Th	andom Thermal Energe e University of South F	gy of a Plasma Into Florida, June 1972	
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				Application Number	09/009,837	
INF(	ORMATION	I DI	SCLOSURE	Filing Date	01/20/1998	
STATEMENT BY APPLICANT				First Named Inventor	Mills	
				Group Art Unit	1754	
(	(use as many she	eets a	s necessary)	Examiner Name	Tsang	
Sheet 1	10	of	12	Attorney Docket Number	9113-23US	

		OTHER PRIOR ART - NON PATENT LITERATURE BOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(5), volume issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		D. Luggenholscher, U. Zarnetzki, and H.F. Dobele Institut fur Laser-und Plasmaphysik, Universitat Essen, Germany, "Investigations on Electric Field Distributions in a Microwave Discharge in Hydrogen"	
		Technology Insights, "Hydro Catalysis Technical Assessment," (Part of 09/009,837 paper no.: 20050207 This document was submitted by R. Mills on 7/17/02 in copending application 09/669,877).	
$\setminus$		Evans Analytical Group, http://www.cea.com/inst.htm#esca2, "Time-of-Flight Secondary on Mass Spectrometry "(TQF-SIMS)	
		J M Luque, M D Calzada and M Saez, "Experimental research into the influence of ion dynamics when measuring the electron density from the Stark broadening of the H∝and Hβ lines."	
		Eng-Kie Souw, "Plasma Density Measurement in an Imperfect Microwave Cavity", 3. Appl. Rhys. 61, 1761, 1987.	
		John R. Shook, "A Pragmatically Realistic Philosophy of Science", <a href="http://www.pragmatism.org/shook/pragmatic_and_Realistic.htm">http://www.pragmatism.org/shook/pragmatic_and_Realistic.htm</a>	
		Raped Nakhmanson, "The Ghostly Solution of the Quantum Paradoxes and it's Experimental Verification", from "Frontiers of Fundamental Physics", Bartone & Selleri, Plenum Press, NY 1994, <a href="http://arxiv.org/ftp/physics/papers/0103/0103006.pdf/">http://arxiv.org/ftp/physics/papers/0103/0103006.pdf/</a>	
		Donald A. McQuarrie, "Quantum Chemistry", University Science Books, CA, 1983, relevant parts of Chapters 4, 6, and 8.	

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(use as many sheets as necessary)					Examiner Name	Tsang			
Sheet	11 of 12			12	Attorney Docket Number	9113-23US			
	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS								
Examiner Initials*	Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the								
		E. Kovacevic, I. Stefanovic, J.Berndt, and J. Wipter, "The Dynamic Response of the Plasma on the Dust Formation in Ar/C²H² Rf Discharges." <a href="http://www.repig.uni-greifswald.stefproceedings/data/kovacevie-1">http://www.repig.uni-greifswald.stefproceedings/data/kovacevie-1</a>							
	N. Cyetanovic, m.M. Kuraica, N. Kenjevic, "Excessive Balmer Line Broadening in a Plane Cathode Abnormal Glow Discharge in Hydrogen", J. Appl. Phys. 97, 033302 (2005)								
	E. U. Condon, Ph. D., G. H. Shortley, Ph. D., "The Theory of Atomic Spectra.", Cambridge, 1967, pp.45-69, and 112-147.								
	Ben Best, "The Copenhagen Interpretation of Quantum Mechanics", <a href="http://www.benbest.com/science/quantum.html">http://www.benbest.com/science/quantum.html</a> >								
	Aaron J. Barth, "Bigger Than Fire?", SKEPTIC Vol. 8, No. 4, 2001.								
$\times$		Notes on David Peat, "Einstein's Moon: Bell's Theorem and the Curious Quest for Quantum Reality." History and Philosophy of Science-Fall, 1997-Dr. Ess, <a href="mailto:swww.drube.edu/ess/philsci/bell.html">www.drube.edu/ess/philsci/bell.html</a>							
		Physics 200-04 Course, "Pauli Spin Matrices", <a href="http://axion.physics.ubc/ca/200-04/paulispin.pdf">http://axion.physics.ubc/ca/200-04/paulispin.pdf</a> .							
		"The Linear Stark Effect", University of Texas Lecture, <a href="http://farside.ph.utexas.edu/teaching/qm/perturbation/node8.html">http://farside.ph.utexas.edu/teaching/qm/perturbation/node8.html</a>							
	K.L. Ross, "Kantian Quantum Mechanics", <a href="http://www.fresian.com/space-2.htm">http://www.fresian.com/space-2.htm</a>								
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Sheet	12		of	12	Attorney Docket Number	9113-23US			
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		Quantum Physics 301, Paradoxes and Interpretation", <a href="http://www.teachphy.brisac.dk/Level30100/CourseMaterials/paradoxes.pdf">http://www.teachphy.brisac.dk/Level30100/CourseMaterials/paradoxes.pdf</a>							
X		The Internet Encyclopedie of Philosophy, "Logical Positivism",  Shttp://iep.utm.edu/logoos.htm>							
	X	H. G. Kuhn, F. B. S., "Atomic Spectre", Longmans, Green & Co., Ltd., London/Harlow 1969 (2 <sup>nd</sup> ed.).							
K		Anthony J. Marchese, Ph. D., Peter Jansson, Ph. O., P.E., John I. Schmalzel, Ph. D., P.E., The Blacklight Rocket Engine", NIAC Phase 1 Final Report (May 1-Movember 39, 2002). www.niac.usra.edu/files/studies/final_report/							
	X	"Average Molecular Kinetic Energy", <a href="http://hyperphysics.phy-astr.gsu.edu/hbase/kinetic/molke.html">http://hyperphysics.phy-astr.gsu.edu/hbase/kinetic/molke.html</a>							
X		"Attempt to Observe Excess Heat in a Ni-H2O-K2CQ3 Electrolysis System-9OCT97", www.earthtech.org/experiments/Mills/mills1.html.							
		Eric Krieg, "Hydripos: A State Below the Ground State" http://ww.freeenergies.org/bl/bwt/z/hydrino/hydripo.htm							
		Peter D. Zimmerman, An Analysis of Theoretical Flaws in So-Called Classical Quantum Mechanics and of Experimental Evidence Against COM (2001)							
		Rathke "A Critical Analysis of the Hydrino Model", New Journal of Physics, 19 May 2005, http://www.iop.org/ej/article/1367-2630/7/1/127/nip8 1 127.html							
		Mills, R., "P to Form Ext www.blackli	cited	and Predicted Hydrino	ure of the Atom, Photon, a States." (web publication	ind Their Interactions June 9, 2004 at			
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